

1. Record Nr.	UNINA9910484686603321
Titolo	Combinatorial Pattern Matching : 21st Annual Symposium, CPM 2010, New York, NY, USA, June 21-23, 2010, Proceedings, / / edited by Amihood Amir, Laxmi Parida
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	1-280-38700-9 9786613564924 3-642-13509-9
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (XIII, 362 p. 84 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6129
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Disciplina	006.4015116
Soggetti	Pattern recognition systems Life sciences Computer programming Algorithms Artificial intelligence - Data processing Data mining Automated Pattern Recognition Life Sciences Programming Techniques Data Science Data Mining and Knowledge Discovery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Algorithms for Forest Pattern Matching -- Affine Image Matching Is Uniform -Complete -- Old and New in Stringology -- Small-Space 2D Compressed Dictionary Matching -- Bidirectional Search in a String with Wavelet Trees -- A Minimal Periods Algorithm with Applications -- The Property Suffix Tree with Dynamic Properties -- Approximate All-Pairs Suffix/Prefix Overlaps -- Succinct Dictionary Matching with No Slowdown -- Pseudo-realtime Pattern Matching: Closing the Gap --

Breakpoint Distance and PQ-Trees -- On the Parameterized Complexity of Some Optimization Problems Related to Multiple-Interval Graphs -- Succinct Representations of Separable Graphs -- Implicit Hitting Set Problems and Multi-genome Alignment -- Bounds on the Minimum Mosaic of Population Sequences under Recombination -- The Highest Expected Reward Decoding for HMMs with Application to Recombination Detection -- Phylogeny- and Parsimony-Based Haplotype Inference with Constraints -- Faster Computation of the Robinson-Foulds Distance between Phylogenetic Networks -- Mod/Resc Parsimony Inference -- Extended Islands of Tractability for Parsimony Haplotyping -- Sampled Longest Common Prefix Array -- Verifying a Parameterized Border Array in  $O(n^{1.5})$  Time -- Cover Array String Reconstruction -- Compression, Indexing, and Retrieval for Massive String Data -- Building the Minimal Automaton of  $A^*X$  in Linear Time, When  $X$  Is of Bounded Cardinality -- A Compact Representation of Nondeterministic (Suffix) Automata for the Bit-Parallel Approach -- Algorithms for Three Versions of the Shortest Common Superstring Problem -- Finding Optimal Alignment and Consensus of Circular Strings -- Optimizing Restriction Site Placement for Synthetic Genomes -- Extension and Faster Implementation of the GRP Transform for Lossless Compression -- Parallel and Distributed Compressed Indexes.

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#### Sommario/riassunto

The papers contained in this volume were presented at the 21st Annual Symposium on Combinatorial Pattern Matching (CPM 2010) held at NYU-Poly, Brooklyn, New York during June 21-23, 2010. All the papers presented at the conference are original research contributions. We received 53 submissions from 21 countries. Each paper was reviewed by at least three reviewers. The committee decided to accept 28 papers. The program also includes three invited talks by Zvi Galil from Tel Aviv University, Israel, Richard M. Karp from University of California at Berkeley, USA, and Je'rey S. Vitter from Texas A&M University, USA. The objective of the annual CPM meetings is to provide an international forum for research in combinatorial pattern matching and related applications. It addresses issues of searching and matching strings and more complicated patterns such as trees, regular expressions, graphs, point sets, and arrays. The goal is to derive non-trivial combinatorial properties of such structures and to exploit these properties in order to either achieve superior performance for the corresponding computational problems or pinpoint conditions under which searches cannot be performed efficiently. The meeting also deals with problems in computational biology, data compression and data mining, coding, information retrieval, natural language processing and pattern recognition. The Annual Symposium on Combinatorial Pattern Matching started in 1990, and has since taken place every year. Previous CPM meetings were held in Paris, London, Tucson, Padova, Asilomar, Helsinki, Laguna Beach, Aarhus, Piscataway, Warwick, Montreal, Jerusalem, Fukuoka, Morelia, Istanbul, Jeju Island, Barcelona, London, Ontario, Pisa, and Lille.

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